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COMMITTEE ON AVIATION ENVIRONMENTAL PROTECTION (CAEP)

STEERING GROUP MEETING

São Paulo, Brazil, 5 to 9 December 2022

Agenda Item 13: Future work

VIEWS OF THE UNITED STATES ON POSSIBLE MEANS FOR MONITORING PROGRESS TOWARDS THE LONG-TERM ASPIRATIONAL GOAL (LTAG)

(Presented by the United States)

SUMMARY

This paper examines the challenges facing ICAO related to monitoring progress towards the long-term aspirational goal (LTAG) and identifies possible means for doing so within CAEP.

Actions by the CAEP-SG is in paragraph 4.

1. **INTRODUCTION**

1.1 The decision at ICAO's 41st Assembly to adopt a long-term aspirational goal (LTAG) in Assembly Resolution A41-21 has the potential to drive significant changes to the international aviation sector and will require investments into its decarbonisation. We welcome this outcome. However, ensuring the success of this outcome will require ongoing efforts by ICAO and its Member States. Section 2 discusses the request and need in monitoring progress towards the LTAG. Section 3 suggests some possible ways forward to address this need. Actions for CAEP are in Section 4.

2. DATA TO MONITOR PROGRESS TOWARS THE LTAG

- 2.1 Paragraph 9 of Resolution A41-21 "requests the Council to regularly monitor progress on the implementation of all elements of the basket of measures towards the achievement of the LTAG." To do this, "the Council will consider necessary methodologies for the monitoring of progress."
- 2.2 Currently, there are several processes within ICAO that provide an opportunity to gather information that could be used to help monitor progress towards the LTAG. We believe that it is critical to establish a single, clear, and transparent methodology that leverages these existing processes and minimizes the creation and duplication of monitoring and reporting schemes, which will strain already limited expert time and resources. For example, net CO₂ emissions from international aviation are already monitored, reported, and verified through Annex 16, Volume IV (CORSIA) and progress towards the collective

medium-term global aspirational goal of keeping the global net carbon emissions from international aviation from 2020 at the same level will be monitored through 2035 (as requested by Council in A41-22, paragraph 17). Section 3, below, suggests some potential ways forward on this issue.

- 2.3 In addition to the monitoring of progress, it is also critical that forecasting be carried out that considers the progress toward the goal as it is being made.
- 2.4 In addition, the work to monitor the LTAG progress will need to include economic aspects. This piece is critical because Paragraph 9 also requests "the impact on the development of the sector, as well as the cost impacts of the efforts to achieve the LTAG."
- 2.5 The United States recognizes that much of the data needed for consideration of these issues are reported to Member States or are items that are analysed within CAEP, but these data and analyses are not, at present, handled together. However, to effectively address the request in Resolution A41-21, it will be important for each of these pieces to be considered both individually to ensure that the data are fit for purpose, but also holistically to ensure that the entire impacts of the LTAG can be assessed by ICAO.

3. **POTENTIAL PATHS FORWARD**

- 3.1 As mentioned in Section 2, ICAO and its Member States already have many data sets and data collection processes available for consideration and potential use in addressing the Paragraph 9 request.
- The existing monitoring, reporting, and verification process captured in Annex 16, Volume IV ("CORSIA SARPs") represents the most accurate data set to monitor net CO₂ emissions from international aviation by quantifying fuel use, CO₂ emissions, emissions reductions from CORSIA Eligible Fuels, and emissions units. In addition, the CORSIA SARPs provide a globally harmonized process for the monitoring and reporting the use of CORSIA Eligible Fuels and emissions units, which are also a critical piece for monitoring progress toward the LTAG. We believe that this MRV process should be a fundamental piece of addressing the Paragraph 9 request. As noted in CAEP/SG20221-WP35 in Resolution A41-22, paragraph 17, the Council requested CAEP to "assess of progress towards achieving the ICAO's global aspirational goal." As such, through 2035, ICAO will already be monitoring the evolution of CO₂ emissions after technology and operational improvements, emissions reductions from CEF including volumes and Life Cycle Emissions Value (LC_f) of SAF and LCAF as well as emissions units. Monitoring net CO₂ emissions through 2035 against a 2020 (or 2019 as pre-Covid proxy) level is a solid starting point towards monitoring progress in reducing CO₂ emissions towards a net-zero goal by 2050.
- 3.3 Annex 16, Volume IV tracks CO₂ emissions after technology and operations improvements. Improvements from technology and operations improvements could be monitored via fuel efficiency metrics (e.g., basis for ICAO's -2% annual fuel efficiency goal) and decomposed through modelling and analyses (e.g., evolution of composition and as-designed fuel efficiency of the global fleet).
- Assembly Resolution A41-21, paragraph 9, calls for the "assessment of the CO2 emissions reduction and cost impacts of a changing climate on international aviation, regions and countries, in particular developing countries, and the impact on the development of the sector, as well as the cost impacts of the efforts to achieve the LTAG." We note that the LTAG-TG Cost Estimation group conducted assessment of the potential cost impacts of the LTAG scenarios at the international level and by region when data was available. Time and data availability constraints limited the assessment of cost impacts at the country level. In the development of the methodology to monitor progress towards the LTAG, further assessment of cost impacts could be considered and leverage LTAG-TG methodologies, FESG information and data as well as experience with country level analyses conducted by WG4.

4. **ACTIONS BY THE CAEP-SG**

- 4.1 The CAEP-SG is invited to:
 - a) discuss the needs for monitoring progress towards the LTAG; and,
 - b) consider the proposals in Section 3 towards the development of the methodology to monitor progress towards the LTAG.

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